

IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) An ultrasonic-motor control system comprising:  
  
an ultrasonic motor;  
  
a controller which starts said ultrasonic motor by changing a drive frequency of said ultrasonic motor from an initial drive frequency;  
  
~~a calculation device which~~ calculator that calculates an initial drive frequency data ~~based on a drive frequency at the commencement of rotation of said ultrasonic motor; and~~  
  
a setting device which sets ~~said~~ the initial drive frequency based on ~~said~~ the initial drive frequency data at a subsequent commencement of driving of said ultrasonic motor;  
  
and  
  
a frequency data storing device in which the drive frequency at the commencement of rotation of said ultrasonic motor is stored as starting frequency data each time said ultrasonic motor starts;  
  
wherein said calculator calculates an average of all said starting frequency data stored in said frequency data storing device, and calculates the initial drive frequency data using the average.

2. (Original) The ultrasonic-motor control system according to claim 1, wherein

said controller starts said ultrasonic motor by reducing a drive frequency of said ultrasonic motor from an initial drive frequency.

3. (Cancelled)

4. (Currently Amended) The ultrasonic-motor control system according to claim 1 3, wherein said frequency data storing device stores a resonance frequency data of said ultrasonic motor; and

wherein said ~~calculation device~~ calculator utilizes the resonance frequency data to calculate a value which is added to said the average in order to obtain said the initial drive frequency data.

5. (Currently Amended) The ultrasonic-motor control system according to claim 4, wherein each time a rotational speed of said ultrasonic motor reaches a maximum rotational speed, said frequency data storing device stores a drive frequency as said the resonance frequency data.

6. (Currently Amended) The ultrasonic-motor control system according to claim 1 3, wherein said the initial drive frequency data is greater than said the average by a predetermined ratio.

7. (Currently Amended) The ultrasonic-motor control system according to claim 1 3, wherein said setting device sets said the initial drive frequency to a maximum value in a controllable frequency range of said controller ~~in the case where~~ when none of said the starting frequency data is stored in said frequency data storing device.

8. (Currently Amended) The ultrasonic-motor control system according to claim 1 3, wherein ~~in the case where~~ when said ultrasonic motor does not start though said controller decreases ~~said~~ the drive frequency of said ultrasonic motor to a minimum frequency in a controllable frequency range of said controller, said controller clears all ~~said~~ of the starting frequency data stored in said frequency data storing device, and said setting device sets ~~said~~ the initial drive frequency to a maximum value in a controllable frequency range of said controller.

9. (Currently Amended) The ultrasonic-motor control system according to claim 1 3, further comprising:

a rotational speed ~~determining device~~ determiner which determines a rotational speed of said ultrasonic motor, upon a lapse of a predetermined time ~~elapsing~~ from said the commencement of rotation of said ultrasonic motor, each time said ultrasonic motor starts;

a rotational speed storing device in which ~~said~~ the rotational speed is stored as speed data, wherein at least a previous speed data and a current speed data are stored in said rotational speed storing device; and

a determining device which determines whether a speed-data difference between the previous speed data and the current speed data is one of equal to and greater than a predetermined value;

wherein said controller clears all ~~said~~ of the starting frequency data stored in said

frequency data storing device ~~in the case where~~ when said determining device determines that ~~said the~~ speed-data difference is one of equal to and greater than ~~said the~~ predetermined value.

10. (Currently Amended) The ultrasonic-motor control system according to claim 9, wherein said setting device sets ~~said the~~ initial drive frequency to a maximum value in a controllable frequency range of said controller ~~in the case where~~ when none of ~~said the~~ starting frequency data is stored in said frequency data storing device.

11. (Currently Amended) The ultrasonic-motor control system according to claim 9, further comprising:

a temperature sensor for sensing an ambient temperature of said ultrasonic motor before each time said controller starts said ultrasonic motor; and

a temperature data storing device in which ~~said the~~ ambient temperature is stored as temperature data, wherein at least a previous temperature data and a current temperature data are stored in said temperature data storing device;

wherein said determining device determines whether a temperature-data difference between the previous temperature data and the current temperature data is one of equal to and greater than a predetermined value,

wherein said controller clears all ~~said of the~~ starting frequency data stored in said frequency data storing device ~~in the case where~~ when said determining device determines that ~~said the~~ temperature-data difference is one of equal to and greater than ~~said the~~

predetermined value.

12. (Currently Amended) The ultrasonic-motor control system according to claim 11, wherein said setting device sets ~~said the~~ initial drive frequency to a maximum value in a controllable frequency range of said controller ~~in the case where~~ when none of ~~said the~~ starting frequency data is stored in said frequency data storing device.

13. (Currently Amended) The ultrasonic-motor control system according to claim 13, further comprising:

a temperature sensor for sensing an ambient temperature of said ultrasonic motor before each time said controller starts said ultrasonic motor;

a temperature data storing device in which ~~said the~~ ambient temperature is stored as temperature data, wherein at least a previous temperature data and a current temperature data are stored in said temperature data storing device; and

a determining device which determines whether a difference between the previous temperature data and the current temperature data is one of equal to and greater than a predetermined value;

wherein said controller clears all ~~said of the~~ starting frequency data stored in said frequency data storing device ~~in the case where~~ when said determining device determines that ~~said the~~ difference is one of equal to and greater than ~~said the~~ predetermined value.

14. (Currently Amended) The ultrasonic-motor control system according to claim 13, wherein said setting device sets ~~said the~~ initial drive frequency to a maximum value in

a controllable frequency range of said controller ~~in the case where~~ when none of ~~said the~~ starting frequency data is stored in said frequency data storing device.

15. (Currently Amended) The ultrasonic-motor control system according to claim 13, wherein ~~said the~~ initial drive frequency data is stored in said frequency data storing device.

16. (Currently Amended) The ultrasonic-motor control system according to claim 13, wherein said frequency data storing device stores the current ~~said~~ starting frequency data and a predetermined number of previous ~~said~~ starting frequency data.

17. (Currently Amended) The ultrasonic-motor control system according to claim 1, wherein said setting device compares ~~said the~~ calculated initial drive frequency with a maximum drive frequency in a controllable frequency range of said controller, and

wherein said setting device sets ~~said the~~ initial drive frequency to ~~said the~~ maximum drive frequency ~~in the case where said~~ when the calculated initial drive frequency is higher than ~~said the~~ maximum drive frequency.

18. (Original) The ultrasonic-motor control system according to claim 1, wherein said ultrasonic-motor control system is incorporated in a camera system.